



Qualcomm Presence with Unifying Signals API Project

Bi-Weekly Report

10th October 2014

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Project progression:

When discovering the project we first decided to all start of by doing a thorough research on presence detecting, Qualcomm, and the market around them. This then led to a series of questions that we wanted to ask our clients. Should we be interacting with other objects in the house ? To detect physical presence should we pass through wifi connections or only stick with motion systems, binary systems.

We organised a Skype call on 6th October with our clients. Before the interview we wanted to be sure we were all clear on the global project. Therefore we decided to meet up with the other group (Qualcomm Occupancy Predictive Engine) to set up a list of questions.

After the interview we now have a much better understanding of the project. We will be detecting physical human presence in a room at a given time and sending the data collected to the other group.

After some brainstorming we came up with our first big task: Covering the in and outs of a door. This will allow us to keep the count of people passing



through a given door. Moreover by covering all the exits of a room tell us how many people are in it.

During the next lab session we listed all the different devices that existed to detect activity. Now we are doing the pros and cons of each device.

Tasks completed:

- Contacting the client.
- Meeting up with the other group.
- Setting a first approach to solving the task.
- We are definitely on time and are quite happy as we have already a good idea of where to take the project.
- We organised a way of communicating internally: Facebook Group created individually and with both group.
- Reading papers about human present detector technologies.
- Doing researches about all different kinds of sensors existing in the market.
- Listing pros and cons for all the possible sensors might be useful for our task.
- Arrange a meeting with technical support team to discuss about choosing hardwares.

Tasks to do in the coming week:

- Contacting our supervisor to present him our first drafted solution.
- Defining specified task within the group.
- New Skype on monday with the clients.
- Having a first on paper layout of how our system is going to function, with the names of all the elements in it.
- Deciding specific hardware which we are going to use in the project and order the hardwares.
- Listing all possible solutions for the task and design physical experiments for each solution.
- Carrying out experiments if essential hardwares are in place.

Task achieved by each person:

For the moment everyone in the group has been doing exactly the same tasks: researching, brainstorming, evaluating.



Client Meeting records:

Date & Time: 06/10/2014 , 11:00

Place: Science Library

1. Apologies

Everyone present.

2. Minutes from the last meeting

- N/A

3. Discussion

- Client interview with Qualcomm team
- Gathering user requirements and system specification
- Allocate tasks between Qualcomm 1 and Qualcomm 2 team

4. Task allocation

Whole team:

- Research on sensors / method for detecting presence

5. Any other business

None

In our inaugural client meeting we made our first introductions and were introduced to the first requirements for the project. Key questions are recorded below.

Is there a limit in the number of devices allowed to be installed in a room ?

No, you can use as many different devices as you want, just bare in mind cost issues and how this might affect the aesthetic of the room.

Should we be interacting with other objects in the house ?

For the moment it is not at all a the priority, of course if by the end of the project you have time to do something like that it could be a plus for you.



Is there a particular way you want us to interact with the other group?

Together you will be finding a way to detect and predict the occupancy of a room. Therefore even though there has to be a certain boundary between the two you are welcome to collaborate together.

Internal meeting records:

Date & Time: 30/09/2014 , 12:00

Place: Malet Place Engineering Building 1.21

1. Apologies

Everyone present.

2. Minutes from the last meeting

- N/A

3. Discussion

- Conduct research on the project
- Schedule client & internal group meeting

4. Task allocation

Whole team:

- Research technical terms & jargons
- Research Qualcomm Gimbal beacon and Alljoyn technology

5. Any other business

None



Date & Time: 07/10/2014 , 14:00

Place: Malet Place Engineering Building 1.21

1. Apologies

Everyone present.

2. Minutes from the last meeting

- Gathering user requirements
- Allocate tasks between Qualcomm 1 and Qualcomm 2 team

3. Discussion

- Research on different sensors
- Having a first on paper layout of how our system is going to function, with the names of all the elements in it.

4. Task allocation

Whole team:

- Research on sensors / method for detecting presence

5. Any other business

None